

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008164**Date Inspected:** 06-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu yang.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay10, Lift 4, Skin C, North Tower.

FCAW welding of weld joint NSD1-FCSA4-1C/C-24, 25, 19, 20; located on Bay10, Lift 4, Skin C, North Tower. Welder is identified as 066673, 066328; ZPMC Quality Control Inspector (QC) is identified as Shi Weisong. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2332-TC-P5-F.

Bay10, Lift 4, Skin A, North Tower.

FCAW welding of weld joint NSD1-FASA4-1E/E-1A, 4A, 90A; located on Bay10, Lift 4, Skin A, North Tower. Welder is identified as 040533, 053870, 040261; ZPMC Quality Control Inspector (QC) is identified as Chen Ying Xin. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F-1.

Bay10, Lift 1, North Tower(Inside), Diaphragm Corner Plate.

FCAW welding of weld joint NSD1-A166G/J-27, 148 & NSD1-A166H/J-23, 143; located on Bay10, Lift 1, North Tower(Inside). Welders are identified as 068919, 057180, 040338, 066155; ZPMC Quality Control Inspector (QC) is identified as Wan Wen Zhong. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-4333-TC-P4-F.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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Bay10, Lift 1, North Tower(Inside), Diaphragm Corner Plate.

SMAW welding of weld joint NSD1-A166G/H-172, 35; located on Bay10, Lift 1, North Tower(Inside).

Welders are identified as 040582, 053049; ZPMC Quality Control Inspector (QC) is identified as Wan Wen Zhong.

The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-3211-B-U2A-1.

This QA Inspector carried out NDE on following:

Bay 10, North Tower, Lift 1.

This QA inspector performs Random Visual Testing (VT), Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel, FOR GREEN TAG. This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

- 1) NSD1-A112C/H-3, 4. Diagonal Stiffener With Skin B & C.
- 2) NSD1-A112E/H-30, 152. Diagonal Stiffener With Diaphragm of BC Corner.
- 3) NSD1-A112F/H-22, 23. Diagonal Stiffener With Diaphragm of BC Corner.
- 4) NSD1-A112G/H-36, 37, 176, 177. Diagonal Stiffener With Diaphragm of BC Corner.
- 5) NSD1-A112C/J-35, 36, 165, 166. Diagonal Stiffener With Diaphragm of BC Corner.
- 6) NSD1-A112D/J-32, 33, 164, 165. Diagonal Stiffener With Diaphragm of BC Corner.
- 7) NSD1-A112E/J-33, 34, 157, 158. Diagonal Stiffener With Diaphragm of BC Corner.
- 8) NSD1-A112F/J-30, 31, 148, 149. Diagonal Stiffener With Diaphragm of BC Corner.
- 9) NSD1-A112G/J-32, 238, 153, 154. Diagonal Stiffener With Diaphragm of BC Corner.
- 10) NSD1-A112H/J-28, 29, 147, 148. Diagonal Stiffener With Diaphragm of BC Corner.
- 11) NSD1-A112D/H-11, 12, 25, 26. Diagonal Stiffener With Bracing Plate of BC Corner.
- 12) NSD1-A112H/H-1 TO 5, 11 TO 15. Butt of Diagonal Stiffener of BC corner.
- 13) NSD1-A166J/J-1 TO 14, 29 TO 40. Butt of Diagonal Stiffener of BC corner.

Bay 10, North Tower, Lift 1, A/B Corner Seam.

This QA inspector performs Random Visual Testing (VT), Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel, FOR GREEN TAG. This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

- 1) NSD1-A112B/H-113A.
- 2) NSD1-A166E/J-52A.

GREEN TAG # 8394.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 13482570045, who represents the Office of Structural Materials for your project.

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## WELDING INSPECTION REPORT

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<b>Inspected By:</b>	Juvekar,Amit	Quality Assurance Inspector
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<b>Reviewed By:</b>	Clifford,William	QA Reviewer
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